

THE HEMI-SYNC® PHENOMENON: IN SEARCH OF EMPIRICAL THEORIES

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Introduction

Three years ago, with much “healthy” scientific doubt I began studying the effects of Hemi-Sync on electrocortical activity of human subjects. Study after study, I have been impressed by the effectiveness and the versatility of this audio technology to guide and entrain the brain to enter a variety of states of consciousness. These days, brain entrainment modalities are in vogue. Unfortunately, however, in my view, entrepreneurs and business people selling these gadgets and tapes seem to benefit more from them than the consumer. Therefore, it is quite refreshing to know that there is a brain-entrainment modality that actually works. In fact, I am convinced that Hemi-Sync goes beyond “blind” entrainment and consequently avoids some of the danger of underdeveloped technologies that clearly have the potential to do harm to those using them.

Although there is a wealth of clinical data with regard to the beneficial effects of Hemi-Sync, there is a lack of empirical theories explaining the phenomenon. And yet without sound and testable theories, we are liable to lose momentum in our research and clinical work, and something that we know has great value is likely to be considered a fad, a gimmick, something unscientific. As Louis Pasteur, the great scientist once stated to a group of medical students, “Without theory, practice is but routine born of habit. Theory alone can bring forth and develop the spirit of invention. It is you especially who are obliged not to share the opinion of those narrow minds who reject everything in science which has no immediate application” (in Reik, 1948, p. ix). Hemi-Sync has many applications, and there are even more applications ready to be unveiled by us as we attempt to construct new theories.

Based on my empirical research, I wish to propose two theories of Hemi-Sync, in this paper. But before introducing these theories, by merely reflecting on the obtained data and observations in our laboratory, I wish to address a few questions raised in the scientific community with regard to the effectiveness of Hemi-Sync. Dr. Lester Fehmi one of the foremost authorities in the field of applied psychophysiology and brain research once stated that he believed Hemi-Sync could drive the brain to enter certain states, but at the same time he emphasized, “...but it doesn’t teach you how to get there. It’s like a pill; in a way you don’t know how the pill works... and you may end up somewhat refreshed but if you had the option to get on a device that would allow you to learn to create the permissive conditions for the creation of this synchrony, then you’d be in much better shape, because then you could apply that anywhere without the tools and begin to learn how to function in everyday activity while

doing that” (in Hutchison, 1986, V. 222). Also, another prominent scientist, Dr. Elmer Green remarked that we should not try to drive the brain but to help people learn to achieve hemispheric synchronization without external sources of brain entrainment (in Hutchison, 1986).

These are indeed legitimate and important questions that require scientific and data-based answers. Is Hemi-Sync a pill? Are we promoting dependency on a tape and a tape recorder for the rest of a patient’s life? Based on solid electroencephalographic data that we have collected in our neuropsychological laboratory, it is quite clear that after a brief period of exposure to Hemi-Sync frequencies, subjects can summon the beneficial effects of this technology at will without the use of any external sources of entrainment. In several studies, it was clearly demonstrated that subjects by merely counting up from one to eleven and simply saying, “access channel open” were able to achieve full bilateral synchrony (see Sadigh, 1990 and 1991a). Furthermore, unlike EEG biofeedback training which is limited to training in a specific state of consciousness (i.e. cognitive or somatic relaxation), Hemi-Sync can promote training in a variety of states ranging from active concentration to sleep. To those who have understandably questioned the effectiveness of Hemi-Sync and its potential to be more than an external driver we offer our data and findings—let them speak for themselves.

Theories of Hemi-Sync

Based on the findings of several studies presented in the Hemi-Sync Journal (see Sadigh, 1990, 1991a, and 1991b), I wish to propose two theories of Hemi-Sync namely, the State Enhancement Theory, and the Hemispheric Communication Theory.

The State Enhancement Theory

One important observation that we made in a number of Hemi-Sync studies was that subjects exposed to the same Hemi-Sync signals achieved bilateral synchronization at different frequencies. One explanation for this phenomenon is that Hemi-Sync goes beyond “blind” entrainment. That is to say, unlike other brain-entrainment modalities which force the brain to produce certain frequencies, Hemi-Sync actually collaborates with the brain to enhance its naturally dominant state.

In summary, according to this theory:

Within a relatively defined frequency range, Hemi-Sync guides the brain to enhance and synchronize itself at its own dominant and naturally occurring frequency and state.

Should we be able to continue to support this theory with further research, we may conclude that Hemi-Sync is indeed a technology beyond entrainment and for that matter it is one of the safest modalities for health improvement and enhancement.

The Hemispheric Communication Theory

A second Hemi-Sync theory in that of the Hemispheric Communication Theory. Based on studies observing the electrocortical activity of patients undergoing psychotherapy, it appears that moments of insight and “clarity” are preceded by moments of bilateral synchrony (see Sadigh, 1991b). This is an important observation since in psychotherapy insight denotes an integration of cognition (LEFT BRAIN) and affect (RIGHT BRAIN).

In summary, this theory may be stated as follows:

Certain Hemi-Sync frequencies allow various unconscious ego-defense mechanisms to be transcended which will in turn facilitate communication between the two hemispheres. This therapeutic communication is likely to allow physical and psychological healing to follow.

Again further research is required to support and expand this theory. Should this theory withstand the test of time, it will provide us with a new way of understanding the human mind and how we may promote its healing.

Conclusion

The purpose of this paper was two-fold. First, a number of questions have been raised in the scientific community with regard to the effectiveness and the potentials of Hemi-Sync. I believe it is time for us to address some of these questions by reflecting on empirical data that has already been collected and analyzed. Secondly, two theories of Hemi-Sync were presented in this paper. In my view, based on these theories, it is imprudent to think of Hemi-Sync as a mere entrainment audio technology. It is a phenomenon worthy of thorough scientific research since it may provide us with many answers about the functioning of the human mind.

References

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